

5/29

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b>	23633
<b>Description:</b> Folding Step Weldment RH	<b>Part Number:</b>	D3388-042
<b>Dwg:</b> D3388 Rev. A	<b>Qty:</b>	5
		Page 1 of 1

Step	Location	Procedure	By	Date	Qty
1	DC	Issue Traveler <del>Dwg not required</del>	HA	05.06.21	5
2	GA	Cut D2622-120C extrusion 85.15" long as per Dwg D3388 Batch: B22364	PD	05-11-10	5
3	GA	Deburr and bevel ends for welding	PD	05-11-10	5
4	WA	Weld arms and end caps as per Dwg D3388. Inspect for foreign objects as per QSI 024. Dwg Rev: A Pick: Qty Part Number Description Batch 2 D2734 End Cap B20157 2 D3387-2 Arm B24120	PD	05-11-17	5
5	GA	Grind end cap welds flush	PD	05/11/23	5
6	QC9/5	Inspect weld and work to Step 5	MA	05/11/23	5
7A	FP	Chemical Conversion Coat as per QSI 005 4.1	FL	05 11 23	5
8	FP	Powder Coat Gloss White (Ref: 4.3.5.1) as per QSI 005 4.3	ML	05 12 09	5
9	FP	Wing Walk as per Dwg D3388 and QSI 005 4.4	ML	05 12 10	5
10	QC3	Inspect Powder Coat and Wing Walk	SB	06/01/18	5
11	GA	Press spacer into D3387-2 arm as per Dwg D3387 Pick: Qty Part Number Description Batch 1 D2808 Spacer B22862	SB	06/01/18	5
12	QC5	Inspect work to Step 11	SB	06-01-26	5
13	ST	Identify and Stock	CL	06/01/26	5
14	AC	Cost / part:	SLC	06-01-27	5
15	DC	Close W/O Inspect Level 21	CL	06/01/27	5

P70

Rev	Date	Change	Revised By	Approved
A	05.02.22	New Issue	KJ/JLM	
B	05.06.10	Added Step 11	KJ/JLM	

RELEASED  
11/15/20

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector	
05-11-16	<del>4b</del>	<del>Weld only one end cap, and grind flush. Then chemical conversion coat step as per QSK 005.4.1. Then finish welding and grind flush, and alodine end cap.</del>	PD	05-11-17	5	<del>AB</del>	<del>2</del>	
		<del>(Add Alodine Step) permanent change</del>	<del>FF</del>	05-11-22	5	<del>AB</del>	05-11-16	
	7b	Bevel, weld, grind aft cap per Dwg B3388 B20957	JE	05-11-28	5	BE		
	7c	QCS / QCG	PD	05-12-08	5	BE		
	7d	Touch up alodine	MM	05-12-08	5	BE		

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			
05-11-16	4	D3387-2 Arms were welded in wrong location, on the RH side of step. Steps are scrap.	AB ABP	remove D3387-2 Arms and re-use arms. Replace See NCR 933. Steps  See E-Mail	PD 05-11-17	2 05-11-16	AB ABP	2 05-11-16

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☐ No ☒ DQA: ☒ Date: 06/01/27

NOTE: Date & initial all entries

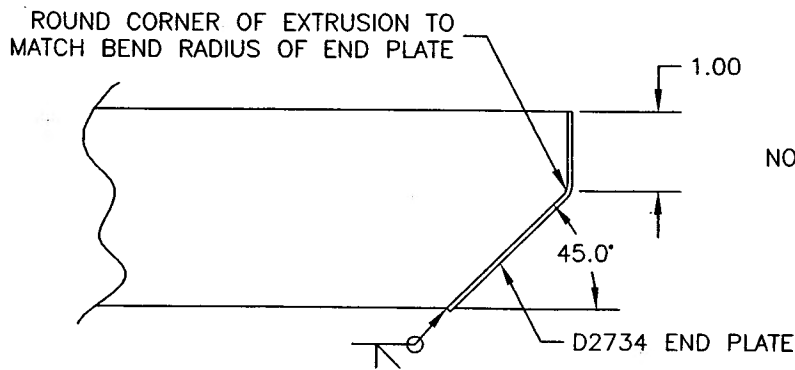
QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_



RELEASED

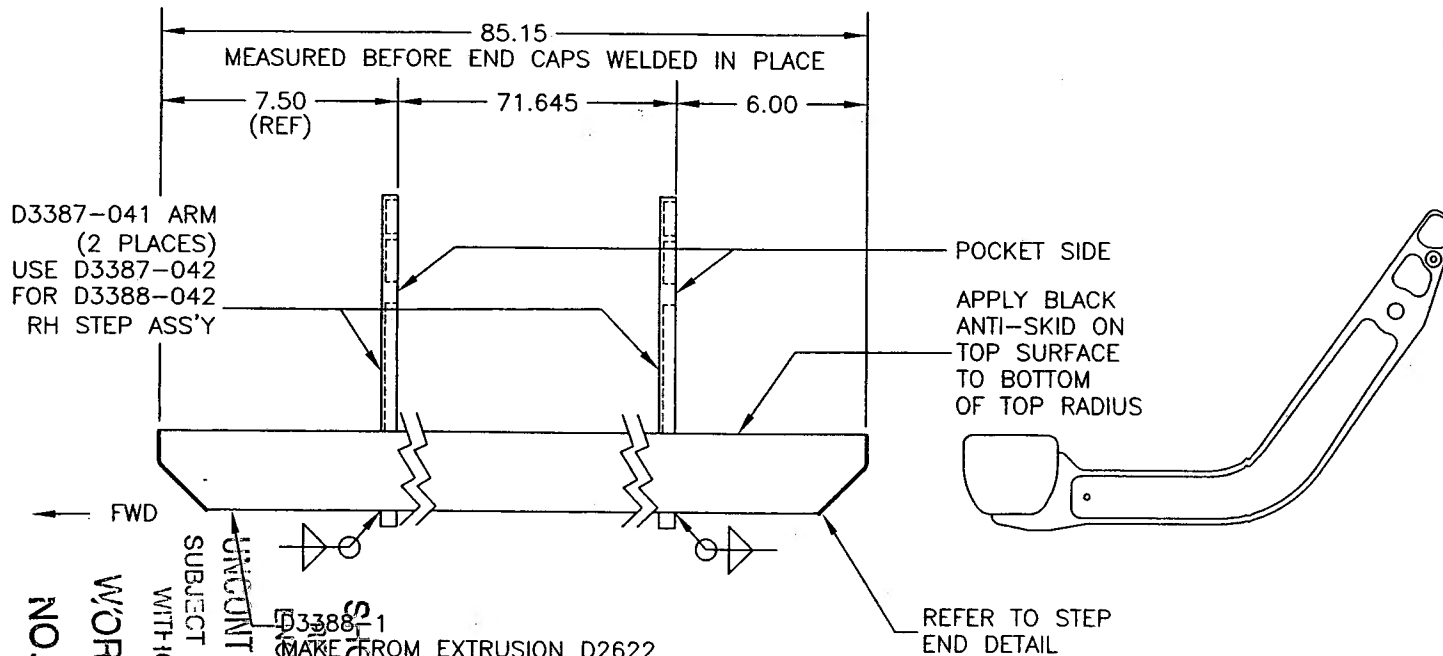
05.03.11

NOTE: ALL WELDS SHALL BE 100% VISUALLY INSPECTED BY A QUALIFIED INSPECTOR PER DART QSI 004



TYPICAL STEP END DETAIL  
NOT TO SCALE

DESIGN	CP	DRAWN BY	CP	DART AEROSPACE LTD HAMKESBURY, ONTARIO, CANADA
CHECKED	CP	APPROVED	CP	DRAWING NO. D3388
DATE	05.01.20	TITLE	STEP WELDMENT	REV. A
A	05.01.20	NEW ISSUE		SHEET 1 OF 1
				SCALE NTS



~~D3388-041 LH STEP ASSEMBLY (SHOWN)~~  
~~D3388-042 RH STEP ASSEMBLY (OPPOSITE)~~

TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED  
WELD PER DART QSI 004 UNLESS OTHERWISE NOTED  
FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

POWDER COAT ENTIRE ASSEMBLY GLOSS WHITE (4.3.5.1) OR GREY SANDTEX (4.3.5.6)  
OR BLACK SANDTEX (4.3.5.7) OR GREEN SANDTEX (4.3.5.8) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4

WORK ORDER

NO. 23633

# Job Costing Report

Dart Aerospace Ltd.  
Hawkesbury

Jun 20, 2005  
03:23 pm

Work Order No : 0023633  
Project Name : D3388-042  
Project For : WK529  
Work Order Type : Main  
Main WO Number :  
House Part Number : D3388-042  
Description : Step Weldment RH  
Manufactured : Yes  
Amount Req'd : 4  
Amount Done : 0  
Start Date : 06-20-05  
Est Finish Date : 07-23-05  
Act Finish Date :  
Drawings Req'd : No  
Ok for Approval :  
Approval Rec'd :

Department Code:  
Burden Flags : NNNNNNNN  
WO Status : Open  
Invoice State : Not Invoiced  
Invoice Date :  
Invoice Number :  
Invoice Amount : 0.00  
Order Entry No :  
OE Value : 0.00  
Est Mark Up : 0.000%  
Actual Mark Up : 0.000%  
\$0 Posted to Finished Goods

	Estimated	Actual	Var. %	Posted	To Post
Material Cost :	0.00	0.00	0.00	0.00	0.00
Engineering Hours :	0.00	0.00	0.00		
Engineering Cost :	0.00	0.00	0.00	0.00	0.00
Production Hours :	0.00	0.00	0.00		
Production Cost :	0.00	0.00	0.00	0.00	0.00
Packaging Hours :	0.00	0.00	0.00		
Packaging Cost :	0.00	0.00	0.00	0.00	0.00
OverHead Hours :	0.00	0.00	0.00		
OverHead Cost :	0.00	0.00	0.00	0.00	0.00
CNC Hours :	0.00	0.00	0.00		
CNC :	0.00	0.00	0.00	0.00	0.00
Misc. Hours :	0.00	0.00	0.00		
Misc. :	0.00	0.00	0.00	0.00	0.00
Burden :	0.00	0.00	0.00		
Total Cost :	0.00	0.00	0.00		
Mark up :	0.000	0.000			
Selling Cost :	0.00	0.00			

	Estimated	Actual
Labour Hrs/Amount Done :	0.00	0.00
Profits/(Loss) :	0.00	0.00

# Job Costing Report

Dart Aerospace Ltd.  
Hawkesbury

Nov 08, 2005  
10:32 am

Work Order No : 0023632  
Project Name : D3388-041  
Project For : WK529  
Work Order Type : Main  
Main WO Number :  
House Part Number : D3388-041  
Description : Step Weldment LH  
Manufactured : Yes  
Amount Req'd : 4  
Amount Done : 0  
Start Date : 06-20-05  
Est Finish Date : 07-23-05  
Act Finish Date :  
Drawings Req'd : No  
Ok for Approval :  
Approval Rec'd :

Department Code:  
Burden Flags : NNNNNNNN  
WO Status : Open  
Invoice State : Not Invoiced  
Invoice Date :  
Invoice Number :  
Invoice Amount : 0.00  
Order Entry No :  
OE Value : 0.00  
Est Margin : 0.000%  
Actual Margin : 0.000%  
\$0 Posted to Finished Goods

	Estimated	Actual	Var. %	Posted	To Post
Material Cost :	0.00	0.00	0.00	0.00	0.00
Engineering Hours :	0.00	0.00	0.00		
Engineering Cost :	0.00	0.00	0.00	0.00	0.00
Production Hours :	0.00	0.00	0.00		
Production Cost :	0.00	0.00	0.00	0.00	0.00
Packaging Hours :	0.00	0.00	0.00		
Packaging Cost :	0.00	0.00	0.00	0.00	0.00
OverHead Hours :	0.00	0.00	0.00		
OverHead Cost :	0.00	0.00	0.00	0.00	0.00
CNC Hours :	0.00	0.00	0.00		
CNC :	0.00	0.00	0.00	0.00	0.00
Misc. Hours :	0.00	0.00	0.00		
Misc. :	0.00	0.00	0.00	0.00	0.00
Burden :	0.00	0.00	0.00		
Total Cost :	0.00	0.00	0.00		
Margin :	0.000	0.000			
Selling Cost :	0.00	0.00			

	Estimated	Actual
Labour Hrs/Amount Done :	0.00	0.00
Profits/(Loss) :	0.00	0.00

*MS d/B*  
*u*  
*11-15*



Date: Monday, 14/11/2005 3:31:41 PM  
 User: Alba Panzuto

## Process Sheet

<b>Customer</b>	: CU-DAR001 Dart Helicopters Services	<b>Drawing Name</b>	: FOLDING STEP WELDMENT LH
<b>Job Number</b>	: 23632		
<b>Estimate Number</b>	: 10463		
<b>P.O. Number</b>	:	<b>Part Number</b>	: D3388041
<b>This Issue</b>	: 14/11/2005	<b>S.O. No.</b>	:
<b>Prsht Rev.</b>	: NC	<b>Drawing Number</b>	: D3388 REV A
<b>First Issue</b>	: / /	<b>Project Number</b>	:
<b>Previous Run</b>	:	<b>Drawing Revision</b>	: A
	<b>Type</b> : LARGE FAB ASSY	<b>Material</b>	:
<b>Written By</b>	:	<b>Due Date</b>	: 15/12/2005
<b>Checked &amp; Approved By</b>	:	<b>Qty:</b>	4 Um: Each
<b>Comment</b>	: Est. B 05.06.10 Added Step 11 KJ/JLM		

## Additional Product

Job Number:



<b>Seq. #:</b>	<b>Machine Or Operation:</b>	<b>Description :</b>
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1.0	BAND SAW	BAND SAW
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**Comment:** BAND SAW

Cut D2622-120C extrusion 85.15" long as per Dwg D3388

Batch: \_\_\_\_\_

2.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1
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**Comment:** LARGE FABRICATION RESOURCE 1

Deburr and bevel ends for welding

3.0	D2734	206 Step Endplate
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4.0	D33871	Arm
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5.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1
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**Comment:** LARGE FABRICATION RESOURCE 1

Weld arms and end caps as per Dwg D3388.

Inspect for foreign objects as per QSI 024. Dwg Rev: \_\_\_\_\_

Grind end cap welds flush

6.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
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**Comment:** HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

7.0	POWDER COATING	POWDER COATING
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**Comment:** POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

Date: Monday, 14/11/2005 3:31:41 PM  
User: Alba Panzuto

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FOLDING STEP WELDMENT LH

Job Number: 23632

Part Number: D3388041

Job Number:



Seq. #:

Machine Or Operation:

Description :

8.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Wing Walk as per Dwg D3388 and QSI 005 4.4

9.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

Inspect Powder Coat and Wing Walk

10.0

D2808

Spacer

11.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Press spacer into D3387-1 arm as per Dwg D3387

12.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

13.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: \_\_\_\_\_

14.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

Job Completion

